



## Mast Cell Tumours in Dogs

Mast cell tumours are the most common cancers of the skin and underlying (subcutaneous) tissue in dogs, despite being quite rare in people. Whilst the genetic abnormalities that occur within the cancer are well characterized, the causes are unknown. Breeds such as Boxers and Staffordshire bull terriers are at much higher risk than other dogs.

Almost all of these cancers begin in or under the skin, but can rarely originate in the stomach or intestine. The tumours themselves generally appear as a lump in the skin whilst and may appear reddened or ulcerated. The tumours vary greatly in their degree of malignancy: some will never be more than a small lump in the skin whilst others will grow rapidly and spread elsewhere in the body. Initially, a diagnosis must be made. At some point, a sample of tissue will need to be sent to the laboratory to determine how aggressive the tumour is. Generally, the cancer will be given a grade, where grade 1 tumours are generally harmless and grade 3 tumours spread rapidly. All of them however tend to burrow deeply into the surrounding tissue such that the visible mass is no more than the “tip of the iceberg” .

The Surgeon therefore will take as much tissue as possible around the cancer to decrease any odds of leaving any microscopic cancer behind. Often, only surgery will be necessary to effect a cure. For tumours of grade 2 or 3 severity, and especially if the location prevents aggressive surgery from being performed (e.g. the leg or face), medications are available that can make a dramatic difference to the future of these dogs. The majority of these dogs with mast cell tumours that need medical therapy will be cured. Furthermore, 95% of the time, there are no side effects. Serious side effects occur 1% of the time.